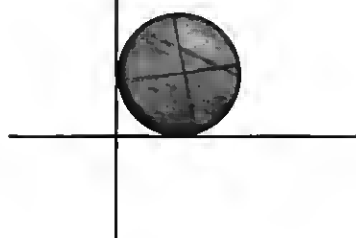


Handbook of Landscape Archaeology



Bruno David and Julian Thomas
Editors



Walnut Creek, CA



LEFT COAST PRESS, INC.
1630 North Main Street, #400
Walnut Creek, California 94596
<http://www.LCoastPress.com>

Copyright © 2008 by Left Coast Press, Inc.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the publisher.

ISBN 978-1-59874-294-7 hardcover

Library of Congress Cataloging-in-Publication Data:

Handbook of landscape archaeology/Bruno David, Julian Thomas, editors.
p. cm.—(World Archaeological Congress research handbooks in archaeology; 1)
ISBN 978-1-59874-294-7 (hardcover: alk. paper)
1. Landscape archaeology—Handbooks, manuals, etc. I. David, Bruno, 1962– II. Thomas, Julian.
CC75.H35 2008
930.1—dc22
2008019849

Printed in the United States of America

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI/NISO Z39.48—1992.

08 09 10 11 5 4 3 2 1

QUARRIED AWAY: THINKING ABOUT LANDSCAPES OF MEGALITHIC CONSTRUCTION ON RAPA NUI (EASTER ISLAND)

*Sue Hamilton, Susana Naboe Arellano, Colin Richards,
and Francisco Torres H.*

The Megalithic Monument and Landscapes of Construction

Monuments have featured strongly within "interpretative" approaches to landscape archaeology (e.g., Richards 1996; Thomas 1992; Tilley 1994, 2004). Within these studies, the "monument" is assumed to be architecturally unproblematic and is experienced as a completed entity. In this chapter, we approach landscapes as contexts of construction, whereby the monument is constantly enmeshed within an ongoing process of alteration and transformation.

The megalithic monument is an attractive entity. Its sheer magnitude creates an allure that reaches out to both archaeologist and non-archaeologist alike. The physical encounter with the scale and presence of the monumental creates a sense of overpowering awe. Of course, this is precisely the intended outcome of such constructions, which in the main act as mnemonics through spectacle. The experience also fascinates, because lurking behind monumental architecture is the imagined toil and ingenuity of its creation. Yet such a conception of labor is inhibited, because through the archaeological lens the view of the monument is inevitably that of a completed entity. It is this entity that is frequently fossilized and presented to the public by national heritage agencies, and consequently

assumes iconic form. However, as Ingold reminds us, "the final form is but a fleeting moment in the life of any feature" (2000: 188).

Archaeology as a discipline was founded on typological reasoning and stratigraphic principles. In other words, all material evidence is classified and sequentially ordered. As a result of this legacy, archaeologists find it difficult, even within a field context, to transform analytical strategies that privilege "phases" (slices of time) over things. In the context of monumental architecture, which frequently appears to incorporate a series of alterations, additions and reconstructions, the idea of phases has been an appealing form of representation. Such an interpretative framework has been employed, for instance, to understand the excavated features and deposits at monuments such as Stonehenge (Atkinson 1956: 58-77; Cleal, Walker, and Montague 1995; Lawson 1997). Because each archaeological "phase" is recognized as a self-contained unit, it is deemed to have both integrity and coherence. In effect, each "phase" is assumed to represent a discrete architectural entity produced by a constructional episode.

There is clearly an attraction in viewing monuments in this manner. At one level it simply reflects our day-to-day understanding and experience of architecture. We are accustomed to see the building process as simply one of facilitation

where architecture is built to be used. Almost overnight, what was a building site suddenly becomes a school, prison, house, or other such entity. Consequently, we tend to think about monuments, as we do other buildings, by privileging the completed form. There is an additional factor here, that of the building assuming a social role only upon completion. At another level, it allows archaeologists to impose a degree of coherence and order to what are frequently very incoherent bodies of evidence.

If, however, the creation of monumental architecture is recognized as having strategic social value and potentially representing an arena of social reproduction, as opposed to being merely a process of facilitation, then the whole nature of monumental construction requires rethinking. Lurking behind final forms or "phases" is the idea of construction as a *process* (see also McFadyen, this volume). Indeed, it could be argued that if the social strategies manifest in the construction process are a primary mechanism of social reproduction, then the creation of monumental architecture is simply an ongoing project of unlimited duration. Other discussions of the creation of monumental architecture have taken similar routes in emphasizing the building process as a continually unfolding project (e.g., Barrett 1994; Evans 1988; McFadyen 2006; Richards 2004) or a "messy" form of experimental practice (Tumhull 1993: 315–17). In each case, the potency of the ultimate monumental form is dissipated within the practical acts of building. Importantly, the building process is not restricted to any given place but is manifest as a series of tasks spreading outwards, weblike from the monument. Here, Ingold's (1993) idea of "taskscape" is of relevance as it not only emphasizes the temporality of engagements by people with the inhabited world but also stresses the specificity of the spatial and temporal rhythms of different tasks (Edmonds 1999).

Rather than minimizing the importance of monumental architecture, we wish to follow the implications of its construction and constitution as a process embodying weblike social strategies radiating from the monument. Here, the social relationships bound up in disparate practices ranging from weaving rope to quarrying stone, inevitably far removed in space and time, achieve a physicality in the monumental. Such practices also give rise to landscapes of construction.

So the challenge when rethinking "the monument" is to link processes of construction with the materiality and fluidity of "taskscape" (Ingold 2000: 194–200) and the social relationships that are constituted and shaped through human labor. This is an interesting avenue of research in many

ways, not least because it ultimately takes us away from the supposed object of study; the monument, to the wider material world of everyday practice and experience, into a particular domain or view of the world conceived as landscapes of construction, and how in this context the idea of "taskscape" meshes with that of a richer understanding of landscape as a social medium (cf. Tilley 2004). Here we explore these issues with reference to Rapa Nui (Easter Island), which is world-famed for its spectacular megalithic architecture. In particular, we focus attention on a major element of the construction process: the megalithic quarry.

Composite Monuments: The *ahu* of Rapa Nui

Rapa Nui is one of the most isolated inhabited islands on earth. Lying as the easternmost island of Polynesia, approximately 3,200 kilometers west of the South American coast, Rapa Nui is actually quite small, having an area of 166 kilometers². Taking triangular form, the island uplift is generated by three great volcanoes, the cones of which constitute each apex (Figure 16.1). From the high cliffs hounding the seaward edges of the three volcanoes, the land drops to form low coastal plains. The coastline is composed of black volcanic lava flows that rise up from the powerful Pacific surf. Inland, the steep cones of smaller volcanoes project upward across the island.

It is along the low barren coastline that the great monuments of Rapa Nui are situated. They take the form of elongated rectangular stone platforms (*ahu*), situated parallel to the shore. Over 300 *ahu* have been identified (Love 1993: 103) along the three low lying coastal strips to the southeast, northwest, and northeast of the island. Of these, 164 have been recognized as statue *ahu* (Martinsson-Wallin 1994: 52). These statues are the famed stone figures (*moai*), which make the monumentality of Rapa Nui one of the best known and recognized throughout the world. The heads of the *moai* were frequently adorned with cylinder-shaped stone topknots (*pukao*). The vast majority of *moai* are sculpted from a distinctive volcanic tuff quarried from the inner and outer surfaces of the Rano Raraku crater, situated to the southeast of the island (Figure 16.1). Conversely, the *pukao* are sculpted from red scoria quarried from the crater of Puna Pau, situated in the southwest of the island (Figure 16.1).

Chronologies for *moai* and *pukao* sculpting are inconclusive, because the quarries have produced little dating evidence. A lengthy period of quarrying activities at Rano Raraku is suggested by the

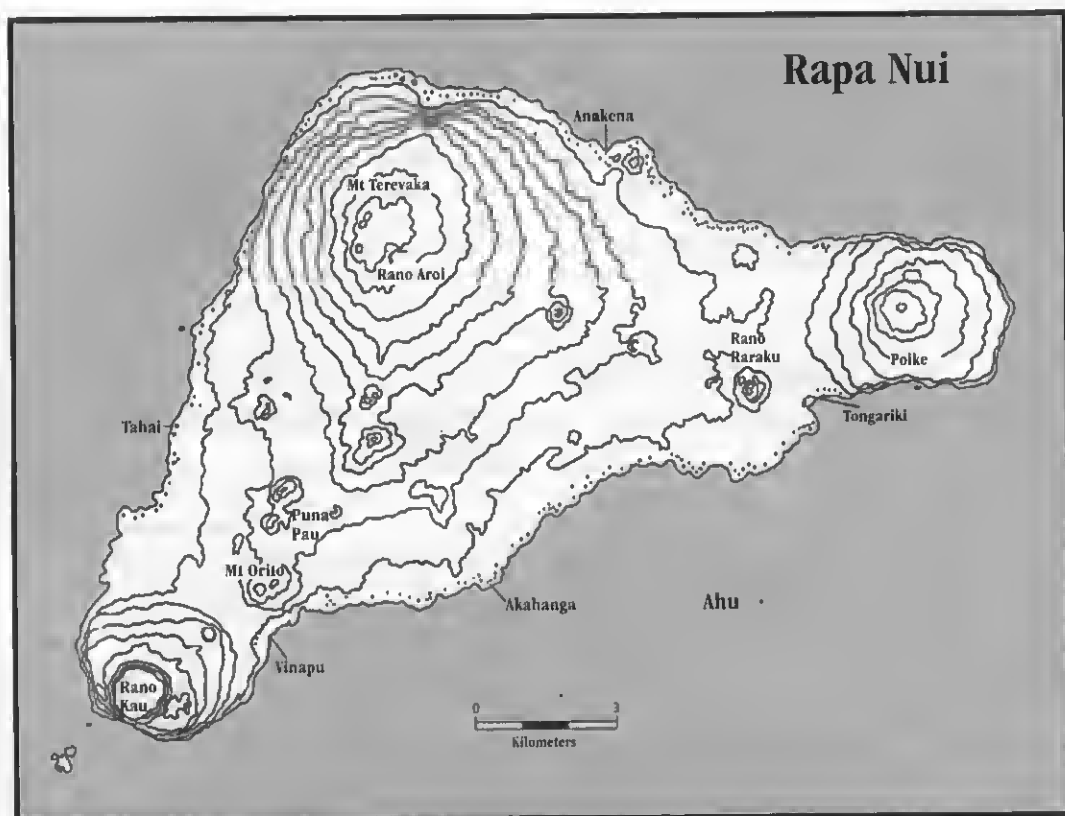


Figure 16.1 Map of Rapa Nui.

early date of A.D. 894–1035, obtained from contexts associated with the kneeling statue *Tukuturi* (Skjølsvold and Figueroa 1989: 32). No investigation has yet been undertaken of the *pukao* quarry at Puna Pau. If the “short chronology” for Rapa Nui, recently forwarded by Hunt and Lipo (2006), is accepted, then *moai* and *pukao* sculpting could have occurred only after initial colonization ca. A.D. 1200. This late date for colonization is all the more intriguing if quarrying at Rano Raraku ceased toward the end of the 14th century A.D. (Dumont et al. 1998).

Against a background of typological (e.g., Ferdon 1961: 527–33; Heyerdahl 1961: 497–502; Mulloy 1961: 159–60; Smith 1961: 218–19) and evolutionary ordering (Kirch 1984: 266–64; Mulloy and Figueroa 1978: 137–38; Stevenson 1986) of *abu* construction, there is clear evidence for more localized and disjointed sequences of monument building (Love 1993: 110). This occurrence led to a high degree of structural complexity at particular *abu*. Such complexity was clearly encountered by Mulloy (1961) during excavations at *abu* Vinapu, and again at *abu* Tahai, causing problems

of deciding what “phase” to actually conserve for public presentation (Mulloy 1997: 14). The continual sequence of building is nowhere better attested than at *abu* Akahanga, on the south coast (Figure 16.2). Here, a lengthy sequence of building has been recognized from surface survey and mapping (Love 1993: 106–10; Van Tilburg 1994: 79–81). There are several features of this *abu* that are of particular interest.

Abu Akahanga actually consists of at least four different *abu* (and probably more), the construction of which was well under way by ca. A.D. 1300 (Van Tilburg 1994: 79). Two further *abu* platforms are present within 50 meters. Love (1993: 106) notes that “at least 4 easily visible Image *abu* construction events are exposed, with architectural hints that these were originally built over 2 or 3 more.” Just as with the attempted recognition of “phases,” the attribution of “construction events” is equally problematic when applied to the building of *abu*. The inadequacy of this form of analysis is latent in Love’s statement: “From . . . the example of *abu* Akahanga . . . it is obvious that currently there are so many undated construction events for

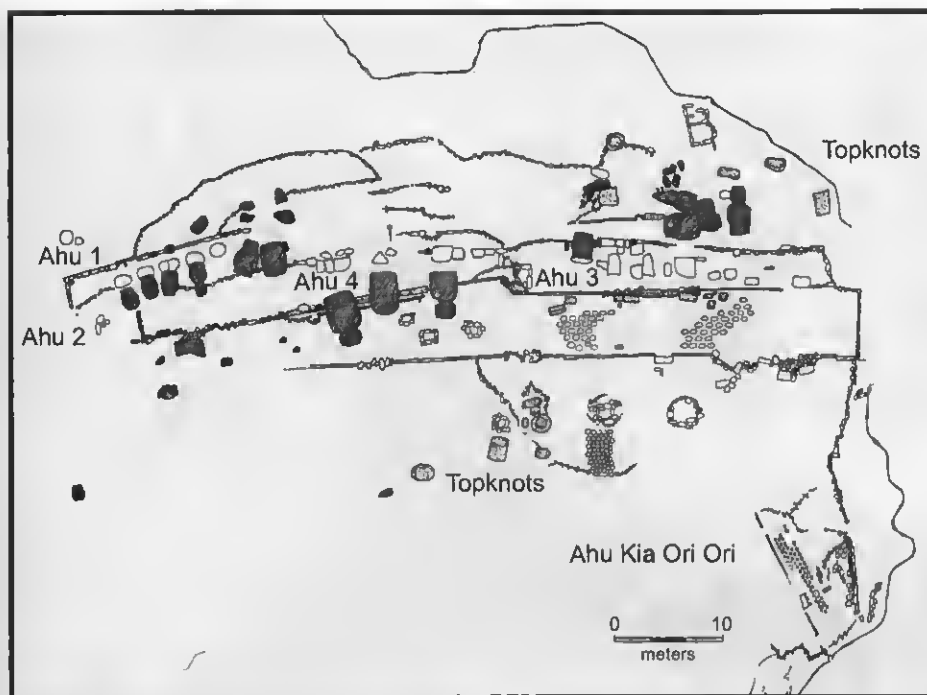


Figure 16.2 Plan of *Ahu Akahanga* (after Van Tilburg 1994 and Love 1993).

any given *ahu*, as well as a continuation and diversity of architectural elements, that even a sample of 14 excavated *ahu* cannot yet yield a significant evolution of Image *ahu* form" (1993: 110). Here the idea of process, the construction of particular *ahu* as ongoing projects, seems to better capture their architectural complexity.

Red scoria topknots (*pukao*), for the *moai*, and fascia for *ahu* embellishment, appear later in the building sequence (ibid.; Van Tilburg 1994: 81). Hence, while the *ahu* is constituted of local basaltic rock, the *moai* of volcanic tuff are being transported from Rano Raraku, and, later, red scoria *pukao* is added from the quarry at Puna Pau. In this respect, the monumental *ahu* are composite structures with the quarrying and transportation of materials derived from different places in the island. Consequently, the *process* of construction was central to the lives of prehistoric Rapa Nui islanders.

Rano Raraku: The Quarry as Monument

There is nothing on Rapa Nui that rivals the spectacular imagery of Rano Raraku, a broad volcanic cone rising from an open plain in the southeast of the island (Figure 16.3). This is the place where

the vast majority of *moai* that adorned many of the *ahu* were created out of a distinctive brown-green volcanic tuff. The volcano has been sculpted in an exquisite manner by the shaping and extraction of many *moai*, but approximately 400 statues still remain in various forms at the quarry. Almost 80 stand erect on the lower slopes of the inner and outer crater in its southern sector. These *moai* face outward, gazing away from the quarry. Above, a belt of discrete quarries traverse the outer and inner slopes of the southern portion of the volcano. Approximately 160 apparently unfinished *moai*, lie in the quarries in various states of shaping.

Invariably, discussions of the quarry tend toward that of *moai* production as an almost "industrial" procedure (e.g., Flenley and Bahn 2002: 116–19; Skjølsvold 1961). After conducting excavations at the quarry in 1955–1956, Skjølsvold (1961) outlined several stages of production. First, the *moai* were shaped *in situ*, mostly in a supine position. Second, they were taken down to the lower slopes and erected vertically, where, third, their backs were dressed and the carving completed. Finally, they were dragged away from the quarry to adorn an awaiting *ahu*. In commenting on the imagery of Rano Raraku, Thor Heyerdahl concludes: "We are left with nothing but a series of production stages" (1961b: 504).



Figure 16.3 View of Rano Raraku from the south.

Significantly, the volcano slopes of Rano Raraku were not exploited as a single massive quarry face (as seen in many modern-day stone quarries) but were carefully subdivided into discrete units or compartments, which can be termed *quarry "bays"* (Figure 16.4). The bays, or niches, were described as having "been worked differently, and each has a character of its own" (Routledge 1919: 178). Equally, after having excavated in the quarry over a period of several months during 1955–1956, Skjølsvold came to similar conclusions: "each individual quarry . . . has its own particular character. In some places only the surface of the rock has been touched, while in others the work has gone relatively deep" (1961: 365).

The differences between quarry bays observed by Routledge and Skjølsvold clearly relate to variable working practices. However, such discrepancies are more than a product of differential "working" practices, and the quarry bays are better appreciated as architecture with very particular forms of spatial representation.

Overall, each quarry bay conforms to one of three discernable spatial arrangements. First, architecture of separation and exclusion where passage into substantial bays is highly restricted. This frequently takes the form of a narrow passage leading into a large open chamber, as seen in Bays

4 and 6 (Figure 16.5). It is this arrangement that led Routledge to comment that it "recalls the side-chapel of some old cathedral, save that nature's blue sky forms the only roof" (1919: 178). Second, a more open, deeply quarried space is presented where *moai* have been removed over a broader area. The imagery here is of an outcrop completely covered by *moai* in various states of carving, such as Bay 3 (Figure 16.6). The stunning spectacle of this architectural representation is clearly more than simply unfinished statues abandoned. Indeed, such imagery drew Metraux (1957: 156) to question the intention of their removal, likening them to huge petroglyphs. Routledge (1919: 181–82) also doubted that all statues shaped in the quarry were intended for removal, and despite the "production-line" perspective of Skjølsvold, he, too, considered that "it is possible to agree with Routledge that these are rock carvings" (1961: 365).

Third is an almost "shrinelike" architectural arrangement whereby the rock is left unworked to frame partially carved *moai*. This architecture is most apparent in Bay 1 (Figure 16.7), where two adjacent (but reversed) *moai* lay in a horizontal position. Metraux succinctly describes this arrangement as "a crypt patiently hollowed out with picks," where "a 50-foot colossus sleeps on a bed of stone" (1957: 156).

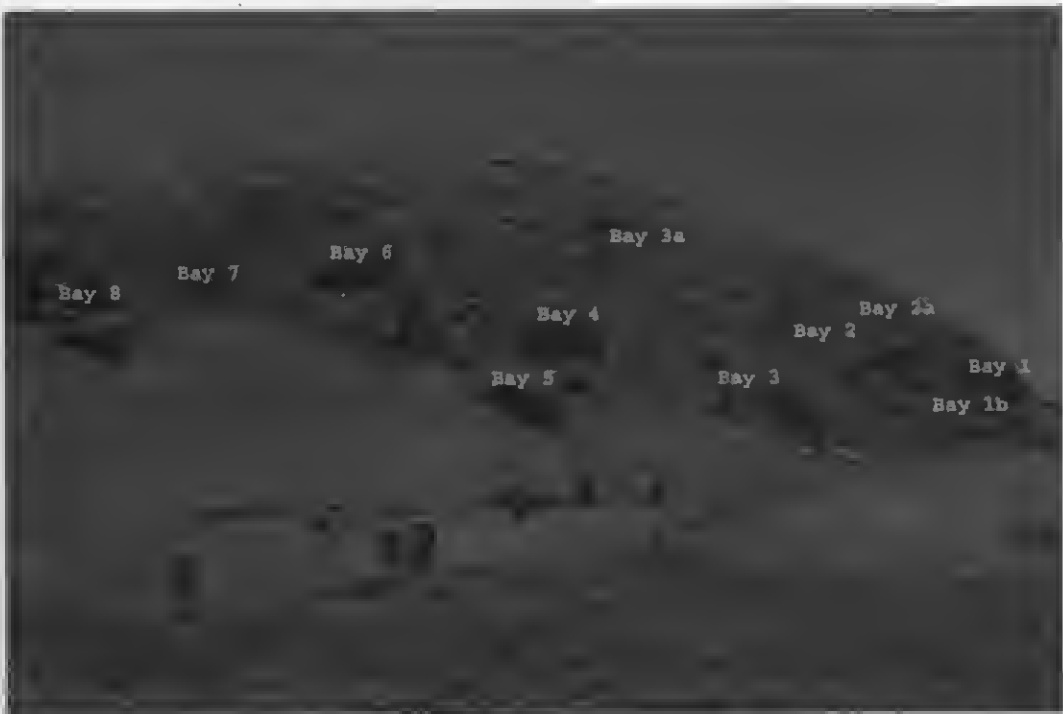


Figure 16.4 Quarry "bays" on outer crater of Rano Raraku.

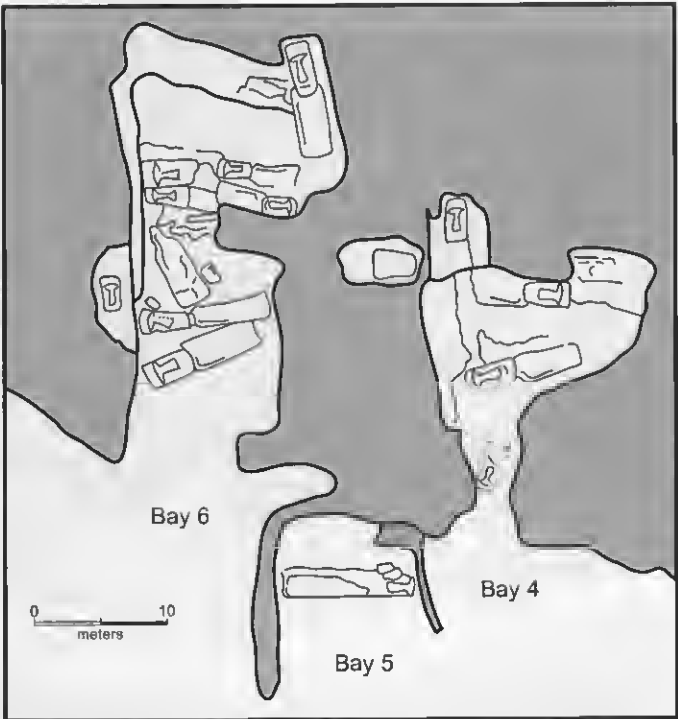


Figure 16.5 Plan of quarry Bays 4, 5, and 6 at Rano Raraku showing restricted access and internal *moat* (modified from Cristino, Vargas, and Izaurieta 1981).



Figure 16.6 Quarry Bay 3 at Rano Raraku.



Figure 16.7 Approach to Bay 1 at Rano Raraku (note the flanking spoil heaps).

These observations of the actual contexts of quarrying *moai* are interesting in that we cannot assume homogeneity of either imagery or practice, nor can we assume equivalence between bays. The encounter with each form of architecture clearly represented a different experience. Some bays have restricted access, others highly visible monstrous petroglyphs, both framed and unframed. Each bay is therefore a discrete entity being effectively severed from its surroundings. Exclusivity and secrecy were strong features. On approach, surrounding workings are gradually lost from sight, and on entering the bay nothing can be seen apart from the imagery of the immediate quarry—only the constant noise of chipping echoing around the slopes would betray the existence of other workers toiling in their bays.

Of the forms of shrinelike architecture, such as Bay 1, where the recumbent statue is “stretched out like a sleeping giant beneath a kind of dais carved in the tufa” (Metraux 1957: 156), additional features serve to enhance the approach. Through the excavations of Skjolsvold in 1955–1956, the entire topography at the base of the volcano is known to be composed of mounds of quarry debris. However, not all of these spoil heaps are randomly sited but are placed strategically. In the case of Bay 1, several spoil heaps flank the approach, providing an avenue effect. This not only channels movement up to Bay 1 but also directs vision toward the framed, darkened cavelike “shrine” (Figure 16.7). Approaching this bay would involve passage up the “avenue” and moving between several erect statues.

For some reason, the erect statues lining the lower slopes of Rano Raraku are generally considered to be unfinished examples, awaiting further sculpting and transportation (Heyerdahl 1961: 504; Routledge 1919: 188; Skjolsvold 1961: 369). However, Routledge (1919: 189) also considered, “a large number of the statues were intended to remain *in-situ*.” This view is also favored by Van Tilburg (1994: 146) who observed: “The numbers and sizes of most of these statues could not have been accommodated on the existing *ahu*, none of which are prepared to receive them.” A consequence of this suggestion is that the statues at Rano Raraku were erected permanently and strategically at the quarry. That these *moai* were integral to the architecture of Rano Raraku is demonstrated by examples standing within the inner crater. Here statues stand, partially covered by stone debris directly outside visible lower quarry bays.

The presence of upright *moai* at the base of the quarry was not a product of incomplete or unfinished working practices (*contra* Heyerdahl

1958: 88). Instead, they presented a monumental facade, structuring and grading the pathways to the quarry bays. Passage to work the stone clearly involved a change in state, effected by a series of architectural devices incorporating statues, spoil heaps, and bay architecture. But when and where did this transformatory process begin and end?

Dwelling within Landscapes of Construction

Today, the vegetation cover is mainly restricted to low grasses providing insignificant island-wide vistas and making such topographic features clearly visible. Yet, this was not always the case. Through root moulds first discovered in excavations by Mulloy and Figueroa (1978: 22), and botanical work (Flenley 1993; Flenley and Bahn 2002: 78–88; Flenley et al. 1991), a very different island is disclosed when the great monuments were being constructed. This island was covered by swaying groves of palm trees, if not forests, with palms up to a meter in trunk diameter and reaching up to 20 meters in height (Flenley and Bahn 2002: 84; Van Tilburg 1994: 47). Indeed, when Rapa Nui was first inhabited, some time between A.D. 800 and 1200 (Hunt and Lipo 2006; Martinsson-Wallin and Crockford 2002), “it must be concluded that rainforest existed on Easter Island” (Flenley and Bahn 2002: 87).

Potentially through this partial vegetation, roads were huilt radiating from Rano Raraku to different areas of the island (see Lipo and Hunt 2005). Much attention has been placed on their role in the transportation of *moai* from the quarry to *ahu* (e.g., Lipo and Hunt 2005: 164; Love 2000: 118). However, a reverse logic may be applied where the roads actually all lead toward the great quarry, thereby fixing Rano Raraku at the center of the Rapa Nui world: an *axis mundi*. Passing different landmarks and changing vistas, the route toward the sacred center is a highly structured journey that becomes monumentalized as the goal is approached. Frequently, described as “in transit” (e.g., Van Tilburg 1987: 33), many *moai* lie apparently abandoned across the land and along the network of roads (Shepardson 2005: 171; Figure 16.8). On one road alone, up to 27 statues were observed by Routledge (1919: 194). Through excavation, Routledge (1919: 195) eventually concluded that many of the *moai* had been set upright adjacent to the roads, facing away from the quarry. This situation was confirmed by Heyerdahl’s (Heyerdahl, Skjolsvold, and Pavel 1989: 45–56) later excavations, where at least one *moai* was found to have stood on a stone platform. As Routledge (1919: 196) evocatively observes:

"Rano Raraku was, therefore, approached by at least three magnificent avenues, on each of which the pilgrim was greeted at intervals by a stone giant guarding the way to the sacred mountain."

However, those making this journey were not all "pilgrims," they were ordinary people engaging in the everyday tasks and activities that constituted their lives. However, the world through which they passed was ordered by social and spatial networks grounded in the process of monument construction. The roadways radiating to and from Rano Raraku may have been constructed for statue transportation but would also operate as routes for ceremonial journeys and more mundane activities. In potentially isolating points of changing and heightened visual and other sensory experience, to travel these formal routes was of far greater consequence than to merely follow functional transport roads. Each route had a unique character, and in many ways within this network was "sedimented the activity of an entire community, over many generations. It is the taskscape made visible" (Ingold 2000: 204).

For those who lived and died on Rapa Nui during the statue-erecting period, the experienced world was organized within a cosmological system that was constituted and revealed by

the never-ending projects of quarrying stone, moving huge statues, and building great monuments. To dwell in Rapa Nui was essentially to labor with monumentality.

Conclusions

In this chapter, we have portrayed the monuments of Rapa Nui as being constantly in a state of flux. Indeed, all the evidence points toward *abu* platforms being constantly enlarged and embellished. Even *moai* appear to be involved in an ongoing process of displacement and replacement, with previous *moai* being incorporated in the body of the *abu*. This process of construction is not restricted to the "monument" but on the small island of Rapa Nui effectively constituted an understanding of landscape as a web of practices associated with monument building. Not only did such practices radiate across the land from the monument to the source quarries within a formalized network of roads, but also the organization of monuments, roadways, and quarries provided a material manifestation of more abstract social and cosmological interrelationships. Construction is a fluid process and consequently landscapes of construction are also



Figure 16.8 Collapsed *moai* adjacent to a roadway.

diverse and fluid; moreover, within their composition is a physicality of the more abstract and intangible aspects of social life. In this respect, landscapes of construction are not merely task-scapes but also provide revelatory experiences to those who inhabit them.

References

- Atkinson, R. 1956. *Stonehenge*. London: Hamish Hamilton.
- Barrett, J. 1994. *Fragments from Antiquity: An Archaeology of Social Life in Prehistoric Britain*. Oxford: Blackwell Publishing.
- Cleal, R., Walker, K., and Montague, R. 1995. *Stonehenge in Its Landscape*. London: English Heritage Monographs.
- Cristino, C., Vargas, P., and Izaurieta, R. 1981. *Atlas arqueológica de Isla de Pascua*. Santiago: Facultad de Arquitectura y Urbanismo, Instituto de Estudios, Universidad de Chile.
- Dumont, H. J., Cocquyt, C., Fontugne, M., Arnold, M., Reyss, J.-L., Bloemendal, J., Oldfield, F., Steenbergen, C. L. M., Korthals, H. J., and Zeeb, B. A. 1998. The end of *moai* quarrying and its effect on Lake Rano Raraku, Easter Island. *Journal of Paleolimnology* 20: 409–22.
- Edmonds, M. 1999. *Ancestral Geographies of the Neolithic*. London: Routledge.
- Evans, C. 1988. Acts of enclosure: A consideration of concentrically organized causewayed enclosures, in J. C. Barrett and I. Kinnes (eds.), *The Archaeology of Context in the Neolithic and Bronze Age*, pp. 85–96. Sheffield: J.R. Collis Publications.
- Ferdon, E. N., Jr. 1961. A summary of the excavated record of Easter Island prehistory, in T. Heyerdahl and E. Ferdon, Jr. (eds.), *Reports of the Norwegian Archaeological Expedition to Easter Island and the East Pacific*, Vol. 1: *The Archaeology of Easter Island*, pp. 527–36. London: Allen and Unwin.
- Flenley, J. R. 1993. The present flora of Easter Island and its origins, in S. R. Fisher (ed.), *Easter Island Studies*, pp. 7–15. Oxford: Oxbow Monograph 32.
- Flenley, J., and Bahn, P. 2002. *The Enigma of Easter Island*. Oxford: Oxford University Press.
- Flenley, J. R., Teller, J. T., Prentice, M. E., Jackson, J., and Chew, C. 1991. The late Quaternary vegetational and climatic history of Easter Island. *Journal of Quaternary Science* 6: 85–115.
- Heyerdahl, T. 1958. *Aku-Aku: The Secret of Easter Island*. London: George Allen and Unwin Ltd.
- . 1961a. Surface artefacts, in T. Heyerdahl and E. Ferdon, Jr. (eds.), *Reports of the Norwegian Archaeological Expedition to Easter Island and the East Pacific*, Vol. 1: *The Archaeology of Easter Island*, pp. 397–489. London: Allen and Unwin.
- . 1961b. General discussion, in T. Heyerdahl and E. Ferdon, Jr. (eds.), *Reports of the Norwegian Archaeological Expedition to Easter Island and the East Pacific*, Vol. 1: *The Archaeology of Easter Island*, pp. 493–526. London: Allen and Unwin.
- Heyerdahl, T., Skjølsvold, A., and Pavel, P. 1989. The “walking” *moai* of Easter Island, in A. Skjølsvold (ed.), *Occasional Papers of the Kon Tiki Museum* 1: 36–64.
- Hunt, T. L., and Lipo, C. P. 2006. Late colonization of Easter Island. *Science* 311: 1603–06.
- Ingold, T. 1993. The temporality of the landscape. *World Archaeology* 25: 152–74.
- . 2000. *The Perception of the Environment: Essays in Livelihood, Dwelling and Skill*. London: Routledge.
- Kirch, P. V. 1984. *The Evolution of Polynesian Chiefdoms*. Cambridge: Cambridge University Press.
- Lawson, A. J. 1997. The structural history of Stonehenge, in B. Cunliffe and C. Renfrew (eds.), *Science and Stonehenge*, pp. 15–38. Oxford: Oxford University Press for the British Academy.
- Lipo, C. P., and Hunt, T. L. 2005. Mapping prehistoric statue roads on Easter Island. *Antiquity* 79: 158–68.
- Love, C. M. 1993. Easter Island *abu* revisited, in S. R. Fisher (ed.), *Easter Island Studies*, pp. 103–11. Oxford: Oxbow Monograph 32.
- . 2000. More on moving Easter Island statues, with comments on the Nova program. *Rapa Nui Journal* 14(4): 115–18.
- Martinsson-Wallin, H. 1994. *Abu—The ceremonial stone structures of Easter Island*. Uppsala: Aun 19.
- Martinsson-Wallin, H., and Crockford, S. 2002. Early settlement of Rapa Nui (Easter Island). *Asian Perspectives* 40: 244–78.
- McFadyen, L. 2006. Material culture as architecture. *Journal of Iberian Archaeology* 8: 91–102.
- Metraux, A. 1957. *Easter Island*. London: André Deutsch.
- Mulloy, W. T. 1961. The ceremonial centre of Vinapu, in T. Heyerdahl and E. Ferdon, Jr. (eds.), *Reports of the Norwegian Archaeological Expedition to Easter Island and the East Pacific*, Vol. 1: *The Archaeology of Easter Island*, pp. 93–180. London: Allen and Unwin.
- . 1997. *The Easter Island Bulletins of William Mulloy*. Houston, TX: Easter Island Foundation.
- Mulloy, W. T., and Figueroa, G. 1978. *The A Kivi—Vai Teka Complex and Its Relationship to Easter Island Architectural Prehistory*. Asian and Pacific Archaeology Series 8. Honolulu: University of Hawai'i Press.
- Richards, C. 1996. Monuments as landscape: Creating the center of the world in late Neolithic Orkney. *World Archaeology* 28: 190–208.
- . 2004. A choreography of construction: Monuments, mobilization and social organisation

- in late Neolithic Orkney, in J. Cherry, C. Scarre, and S. Shennan (eds.), *Explaining Social Change: Studies in Honour of Colin Renfrew*, pp. 103–14. Cambridge: McDonald Institute Research Monograph.
- Routledge, K. 2005 [1919]. *The Mystery of Easter Island*, Rapa Nui: Museum Press.
- Shepardson, B. L. 2005. The role of Rapa Nui (Easter Island) statuary as territorial boundary markers. *Antiquity* 79: 169–78.
- Skjølsvold, A. 1961. The stone statues and quarries of Rano Raraku, in T. Heyerdahl and E. Ferdon, Jr. (eds.), *Reports of the Norwegian Archaeological Expedition to Easter Island and the East Pacific*, Vol. 1: *The Archaeology of Easter Island*, pp. 339–79. London: Allen and Unwin.
- Skjølsvold, A., and Figueroa, G. 1989. An attempt to date a unique, kneeling statue in Rano Raraku, Easter Island. *Occasional Papers of the Kon Tiki Museum* 1: 7–35.
- Smith, C. S. 1961. A temporal sequence derived from certain alu, in T. Heyerdahl and E. Ferdon, Jr. (eds.), *Reports of the Norwegian Archaeological Expedition to Easter Island and the East Pacific*, Vol. 1: *The Archaeology of Easter Island*, pp. 181–218. London: Allen and Unwin.
- Stevenson, C. M. 1986. The socio-political structure of the southern coastal area of Easter Island: A.D. 1300–1864, in P. V. Kirch (ed.), *Island Societies: Archaeological Approaches to Evolution and Transformation*, pp. 69–77. Cambridge: Cambridge University Press.
- Thomas, J. 1992. The politics of vision and the archaeologies of landscape, in *Landscape, Politics and Perspectives*, B. Bender (ed.), pp. 19–48. Oxford: Berg.
- Tilley, C. 1994. *The Materiality of Stone*. Oxford: Berg.
- . 2004. *A Phenomenology of Landscape*. Oxford: Berg.
- Turnbull, D. 1993. The ad hoc collective work of building gothic cathedrals with templates, string and geometry. *Science, Technology and Human Values* 18(3): 315–40.
- Van Tilburg, J. A. 1987. Symbolic archaeology on Easter Island. *Archaeology* 40(2): 26–33.
- . 1994. *Easter Island: Archaeology, Ecology and Culture*. London: British Museum Press.